

control input 116 is provided which is used to enable operation of the VCO 104 when an operation of the non-linear electromagnetic transducer 102 (hereinafter referred to as a transducer) is required, such as when the transducer 102 is utilized to generate a tactile alert when utilized in an electric device, such as a pager or portable cellular telephone. The variable frequency output of the VCO 104 is coupled to a clock input of the D flip-flop 110 and to a first input of the phase comparator 108. The D flip-flop 110 operates as a frequency divider providing a predetermined division value of two (col. 3 lines 9-34). Examiner's interpretation in view of Mittel et al. that the frequency is vary over a predetermined range of 40-120 Hertz and resonance frequency from 90-100 Hertz in order to drive the tactile alerting device. [Sic.]

Applicants respectfully disagree. As noted in Applicants' last response:

Claims 1, 10 and 11 of the instant application have been amended to recite that the drive signal for the vibrator has a frequency which varies within a range between a low frequency limit which is less than the resonance frequency of the vibrator and a high frequency limit which is greater than said resonance frequency and which matches the resonance frequency during the variation.

In contrast, in the mode tracking transducer driver of **Mittel et al.**, a frequency of the drive signal to the transducer is gradually increased, and lowered to a predetermined value at the point where the transducer 102 jumps out of domain I to domain II and which is defined as *quasi-resonant frequency 204 serving as an upper limit within the frequency variation* (see col. 4, line 40 to col. 5, line 28 and Fig. 2). (Emphasis added.)

Thus, **Mittel et al.** actually states that, in domain I, the quasi-resonant frequency 204 is the upper limit of frequency variation. This is in contrast to the claimed invention, in which the high frequency limit of the vibration is greater than the resonance frequency.

Furthermore, Applicants do not understand how the Examiner has interpreted “optimum frequency of operation is from 90 Hertz to 100 Hertz”, as disclosed in column 3, lines 23-24 to mean a “resonance frequency” of 90-100 Hz. This passage merely refers to the optimum frequency for a user to feel the vibrations of a tactile alerting device, and is not related to the resonance frequency of the device.

In other words, as Applicants argued in the telephone interview conducted with the Examiner on October 5, 2004, the “optimum frequency of operation” more likely refers not to resonance of the device but to the frequency range which is optimum for the user’s skin to detect vibrations.

A Notice of Allowance is earnestly solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants’ undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time